The Influence of Online Tax Services on Service Delivery at Kenya Revenue Authority – Nakuru Station

Joel Sikirio Kwemei[1] & Dr. Weldon Kibet Ng'eno[2]
[1,2]Public Policy and Administration Department, Kenyatta University
Corresponding Email: joel.kwemei@gmail.com

Abstract

Purpose: This study examined the influence of Online Tax Services on service delivery at the Kenya Revenue Authority (KRA) Nakuru Station.

Methods: Utilizing a descriptive case study research design, the study targeted a population of 504 staff and customers at the station. A sample size of 287 was derived using Yamane's (1967) formula.

Results: The findings reveal a moderate positive correlation (Pearson correlation coefficient of 0.538) between Online Tax Services and service delivery, indicating that improvements in the availability and functionality of these services are associated with better service delivery outcomes. Regression analysis further confirms that Online Tax Services significantly impact service delivery, with an unstandardized coefficient of 0.317 and a standardized coefficient of 0.271. This suggests that enhancing these services results in a moderate improvement in service delivery. Respondents also noted the benefits of reduced processing times, increased accuracy of tax assessments, and improved taxpayer compliance. However, concerns about staff training and readiness indicate a need for further capacity-building efforts to fully optimize the benefits of digitization.

Conclusion: The study concludes that while Online Tax Services positively influence service delivery, additional focus on staff engagement and system reliability is essential for sustained improvements.

Keywords: *Online Tax Services, Service Delivery, KRA, iTax and Taxpayer Compliance*

1. Introduction

For governmental agencies around the world, providing services is still a struggle. Poor service delivery is frequently characterised by a lack of response to residents' requirements, delays in service supply, and restricted access to different government services, as noted by Lopes, Soares, Nielsen, and Tavares (2017). The quality of services provided, the speed at which services are delivered, and a lack of accountability and transparency are further issues with service delivery that state agencies have identified (Blair, 2018; Mansoor & Williams, 2018). Government service culture, the unfavourable attitudes of government service providers, and organisational culture are some of the elements that contribute to the challenges in providing government services (Ajibade, Ibietan, & Ayelabola, 2017).

Canada Revenue Agency has implemented many different initiatives, which have e-service components, such as filing tax returns for individuals or businesses, receiving email notifications, and submitting documents. CRA is also continuing to invest in expanding its digital services, such as the e-Payroll project, which was announced in Budget 2021 (CRA, 2021). As these services become digital, the importance of strengthening security to protect Canadians' private information is critical, and it is one of the strategic priorities outlined in the Agency's Departmental Plan

The Rwanda Revenue Authority (RRA), which is in charge of all tax collection in the country, has made significant investments in digital tax services (RRA, 2023). The RRA has concentrated on streamlining tax forms and procedures to provide taxpayers with greater ease. It also uses third-party platforms to gather data to ensure a reliable and effective process. These investments, when combined with tax changes, have shown encouraging first results, such as a notable rise in Rwanda's tax-to-GDP ratio and improved ranking index in the World Bank's Ease of Doing Business, especially when it comes to "paying taxes (Musasizi, 2022).

The Kenya Revenue Authority (KRA) in Kenya made significant technological investments between 2013 and 2017 to sustain its outstanding performance. To provide more coordinated and efficient service delivery, KRA deployed next-generation business systems during this time. These technologies were designed to streamline the administration of tax procedures and create a one-off perspective integration of the taxpayer (Kamara, 2021). Modern platform-based integrated which are systems have superseded the antiquated Simba 2005 and iTMS main business systems. In addition, a Data Warehouse and Business Intelligence solution, a cutting-edge secondary data centre, and other systems like i-Support were put into place (Chemboi, 2018).

1.1 Problem Statement

Service delivery is a critical component in the efficiency of revenue collection agencies worldwide. Effective service delivery ensures that taxpayers are compliant; experience fewer delays, and interact smoothly with tax authorities. Many revenue collection agencies, including those in developing countries, have increasingly embraced online tax services to improve service delivery. These platforms allow for easier tax registration, filing, and payment, aiming to enhance the overall user experience while increasing compliance levels.

In Kenya, the Kenya Revenue Authority (KRA) has implemented various online tax systems, such as the iTax platform, as part of its efforts to streamline tax collection and improve service delivery. While this digital transformation has significantly impacted the way taxes are filed and collected, the challenge remains in ensuring that these online services effectively meet the needs of taxpayers across various regions. In urban centers like Nairobi, service delivery has shown marked improvements, yet in other regions, the results are mixed.

Nakuru, one of Kenya's major urban centers, presents a unique case. Despite the nationwide adoption of iTax, taxpayers at Nakuru Station have raised concerns regarding the efficiency and effectiveness of online tax services. Issues such as system downtimes, poor internet connectivity, limited taxpayer knowledge, and lack of adequate support services may be affecting the quality-of-service delivery in this region. This situation highlights the need for localized studies to assess how online tax services influence service delivery specifically at the Nakuru station of the KRA.

Previous studies, such as those conducted by Mwasarabu (2020), Wangwama (2019), and Kisangau (2019), have examined the adoption of online tax services and their influence on

service delivery at KRA in general. Mwasarabu's research focused on the factors influencing revenue collection through mobile money transfer in Kenya revenue authority, Wangwama (2019) explored effects of revenue collection practices on county government financial performance in Kenya, and Kisangau (2019) explored the factors affecting customer satisfaction at the Kenya revenue authority in Mombasa. However, none of these studies narrowed down to specific stations or regions like Nakuru, nor did they provide a localized perspective on the unique challenges faced by taxpayers in these areas.

The current study aimed to fill this gap by focusing on the influence of online tax services on service delivery at the Kenya Revenue Authority – Nakuru Station. By examining taxpayer experiences and the operational challenges specific to Nakuru, this study sought to provide insights into the effectiveness of KRA's online services in a regional context, thus contributing to improved service delivery and greater taxpayer compliance in Nakuru and similar regions across Kenya.

2. Literature Review

The Technology Acceptance Model (TAM) was first introduced by Fred Davis in 1989 and later expanded by Davis and Richard P. Bagozzi in 1989 and 1992. TAM aims to explain and predict technology adoption based on users' perceptions of its usefulness and ease of use. According to TAM, individuals are more likely to embrace new technology if they believe it will benefit their tasks and if they find it easy to operate. This model is widely applied in information systems research to understand and forecast user acceptance of various technologies, such as software applications, websites, and digital platforms.

Critically, TAM has been praised for its simplicity and effectiveness in explaining technology adoption behavior. By concentrating on perceived usefulness and perceived ease of use, TAM offers a clear framework for understanding users' attitudes and intentions regarding technology adoption. However, some critiques have emerged regarding TAM's limited consideration of external factors that may influence technology acceptance, such as social influences, organizational context, and individual characteristics. Additionally, TAM has been criticized for its static nature, as it does not account for changes in users' perceptions over time or the dynamic nature of technology adoption processes.

The study aims to assess the impact of Online Tax Services on service delivery. TAM provides a theoretical framework for understanding taxpayers' acceptance and use of these digital tools. By applying TAM, researchers can investigate taxpayers' perceptions of the usefulness and ease of use of these technologies. For instance, the study can examine how taxpayers' perceived usefulness of Online Tax Services influences their willingness to adopt and utilize these services for tax-related transactions. Similarly, TAM can help analyze the role of perceived ease of use in shaping taxpayers' attitudes towards Mobile Applications offered by the Kenya Revenue Authority, Nakuru Branch, and their subsequent impact on service delivery effectiveness.

3. Methodology

A descriptive case study research design was employed for this study. This design was chosen because it facilitates a detailed analysis of the attributes and characteristics of a specific group, organization, or situation (Mugenda and Mugenda, 2013). The population of the study targets 504 members of staff working at the Nakuru branch and the recipient of the services. The 504 population included all the heads of departments, administrative, enforcement staff, and customers at Nakuru branch distributed as indicated in Table 1. The population of the study

was appropriate since all the 504 members of staff and customers at Nakuru Branch had KRA pins and, thus, taxpayers.

Table 1: Target Population

Category	Target Population	Percentage
Senior Managers	7	1%
Middle-Level Managers	13	3%
Head of Departments	24	5%
Administrative Staff	122	24%
Enforcement Staff	138	27%
Customers	200	40%
Total	**504**	**100**

Source: KRA (2024)

To choose participants, the study used a sort of stratified sample methodology called stratified sampling design. This technique guarantees that each member of the population has an equal probability of being selected for the sample. It's particularly useful when dealing with finite population targets, ensuring representativeness while efficiently managing resources.

A sample size was derived using the formula suggested by Yamane (1967). The formula is

$n = N/(1+Ne^2)$.

Where;

n= Sample size,

 N= Target population,

 e= Significance level (0.05).

 The significance level of 0.05 provides a confidence level of 95%.

From the study target population, $n = 504/(1+504 e^2)$

$= 504/1.75 = 287$

Therefore, the study will sample 287 customers

Table 2: Sampling and Sample Size

Category	Target Population	Percentage	Sample Size
Senior Managers	7	2.3	4
Middle-Level Managers	13	4	7
Head of Departments	24	7.7	13
Administrative Staff	122	40.3	70
Enforcement Staff	138	45.7	79
Customers	200	57	114
Total	**504**	**100**	**287**

Source: Researcher (2024)

A questionnaire was administered to gather respondents' data for the study. Both closed (structured) and open-ended (unstructured) questions were included in the survey. Since they produce less uncertainty, many researchers favour closed-format questions (dichotomous, Likert scale, or multiple choice). Conversely, closed-ended questions are preferred in studies that seek to establish a particular behavior of the interviewee.

4. Results and Discussion

The study targeted a total sample size of 287 respondents. However, the researcher successfully collected 270 questionnaires out of the targeted 287. This represents an overall response rate of approximately 94.1%, which is considered an excellent rate for data collection, ensuring a reliable representation of the study population

4.1 Demographic Information

The respondents were required to fill the demographic information that included age, gender, level of education role in the company, and duration in the company.

4.1 Gender
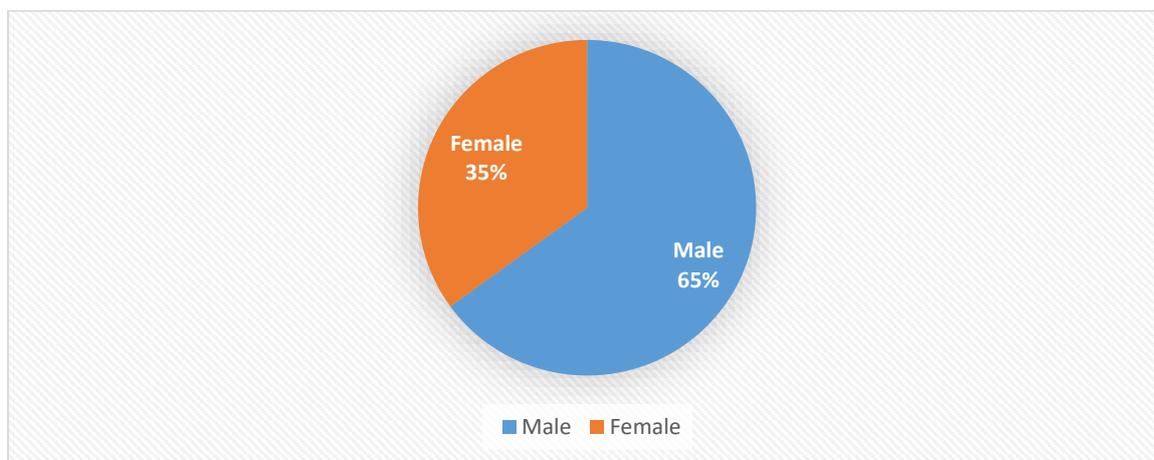
Figure 1 Gender of respondents

Source: Research Data (2024)

The data reveals a gender distribution among respondents for the study on the impact of digitization on service delivery at the Kenya Revenue Authority (KRA) – Nakuru Station. Out of a total of 270 respondents, 175 are male, constituting 64.8% of the sample, while 95 are female, making up 35.2%. This distribution shows a predominant representation of male respondents in the sample. The higher percentage of male respondents could influence the overall findings, particularly if there are gender-based differences in perceptions or experiences related to digitization and service delivery.

Table 1: Level of Education

Category	Frequency	Percent
Primary	20	7.4
Secondary	23	8.5
College	69	25.6
Undergraduate	108	40.0
Postgraduate	50	18.5
Total	**270**	**100.0**

Source: Research Data (2024)

The data on the level of education among the respondents shows that a significant proportion of them are well-educated. A majority, 40.0%, have attained undergraduate qualifications, while 18.5% hold postgraduate degrees. This suggests that a combined 58.5% of the

respondents have completed higher education, which may indicate a high level of familiarity with the digital services provided by the Kenya Revenue Authority (KRA). Additionally, 25.6% of respondents have a college-level education, further contributing to the pool of well-educated individuals likely to engage with digitized tax services.

On the other hand, smaller proportions of the respondents have primary (7.4%) or secondary (8.5%) education. These groups may have lower digital literacy and may face challenges in accessing or using online tax services, mobile applications, or data analytics tools effectively.

Table 2: Role in the Company

Category	Frequency	Percentage
Senior Managers	4	1.5
Middle-Level Managers	6	2.2
Head of Departments	11	4.1
Administrative Staff	65	24.1
Enforcement Staff	77	28.5
Customers	107	39.6
Total	**270**	**100.0**

Source: Research Data (2024)

The data on the roles in the company reveals that the majority of respondents, 39.6%, are customers, followed by enforcement staff, who make up 28.5% of the sample. This indicates that significant portions of the respondents are external stakeholders or directly involved in the operational aspects of service delivery at the Kenya Revenue Authority (KRA) Nakuru Station.

Administrative staff comprise 24.1% of the respondents, suggesting that a substantial group is involved in the back-office functions that support KRA's operations. Meanwhile, heads of departments, middle-level managers, and senior managers collectively account for a smaller proportion of the sample, totaling 7.8%. Their input would be essential for understanding the strategic and management perspectives of digitization.

The data suggests a balanced representation of internal staff and external customers, which provides diverse insights into the influence of digitization on service delivery from both the service providers' and recipients' perspectives. The high percentage of customers also highlights the importance of user experience in evaluating the effectiveness of KRA's digitized services.

Table 3 Duration of Employment

Category	Frequency	Percentage
Less than 5 years	105	38.9
5-10 years	89	33.0
11-15 years	44	16.3
Over 15 years	32	11.9
Total	**270**	**100.0**

Source: Research Data (2024)

The data on the duration of employment shows that a significant portion of respondents, 38.9%, have been employed for less than 5 years, indicating that many employees are relatively new to their roles at the Kenya Revenue Authority (KRA) Nakuru Station. This group is likely to

bring fresh perspectives on the adoption of digital services and may have had less exposure to traditional service delivery methods.

Additionally, 33.0% of the respondents have worked for 5-10 years, suggesting a solid representation of moderately experienced employees who have likely witnessed the transition from older service delivery methods to the current digital systems.

Employees with 11-15 years of experience make up 16.3% of the sample, while those with over 15 years of experience represent 11.9%. These groups provide the perspective of long-term employees who have likely seen the full evolution of service delivery at KRA and can offer valuable insights into the impact of digitization over time.

4.2 Descriptive analysis

The study aimed to identify the factors influencing the impact of Online Tax Services on service delivery at the Kenya Revenue Authority (KRA) Nakuru Station. The researcher employed Likert scale questions, ranging from 1 to 5, where 1 represented Strongly Disagree (SD), 2 = Disagree (D), 3 = Neutral (N), 4 = Agree (A), and 5 = Strongly Agree (SA). Additionally, the Likert scale questionnaires included open-ended questions, which were analyzed and presented thematically. The findings are organized under various themes, supported by relevant secondary information.

4.2.1 Online Tax Services

The study under this objective aimed to establish the influence of Online Tax Services on service delivery at the Kenya Revenue Authority – Nakuru Station. The results are presented in the following table

Table 4: Online Tax Services

	N	Mean	Std. Deviation
Online Tax Services have improved the efficiency of tax collection processes at Kenya Revenue Authority	270	3.8370	1.16138
I find Online Tax Services easy to navigate and use for my work tasks.	270	3.7000	1.19898
Online Tax Services have reduced the time required to process tax-related tasks compared to traditional methods	270	3.9000	1.08436
The availability of Online Tax Services has positively impacted the quality of service delivery at Kenya Revenue Authority.	270	3.9556	1.06563
Online Tax Services have increased the accuracy of tax assessments and calculations.	270	3.7667	1.20146
I feel adequately trained to utilize Online Tax Services effectively in my job role.	270	3.5296	1.37322
Online Tax Services have enhanced communication channels between taxpayers and Kenya Revenue Authority staff.	270	3.8519	1.10772
The introduction of Online Tax Services has increased job satisfaction among Kenya Revenue Authority staff.	270	3.5667	1.41198
I believe that Online Tax Services have improved compliance rates among taxpayers	270	3.9778	.97909
Online Tax Services have streamlined internal processes within Kenya Revenue Authority departments.	270	3.5519	1.21143
Overall, I perceive Online Tax Services as beneficial to the service delivery objectives of the Kenya Revenue Authority.	270	3.6259	1.30372
Total Mean		3.751	

Source: Research Data (2024)

The data provided offers insights into the influence of Online Tax Services on service delivery at the Kenya Revenue Authority (KRA) Nakuru Station. The responses from 270 participants revealed that, on average, there is a positive perception of the effectiveness of Online Tax Services, with a total mean score of 3.751. This suggests that most respondents generally agree that these services have positively affected various aspects of service delivery.

Firstly, the highest mean score (3.9778) indicates that respondents strongly believe Online Tax Services have improved compliance rates among taxpayers, showing the effectiveness of these services in ensuring that taxpayers adhere to regulations. Additionally, the ease of use and navigability of Online Tax Services received a moderately high mean score of 3.7000, suggesting that while many find the platforms user-friendly, there is still room for improvement. This is in agreement with Njoroge (20219) who found that a one-unit increase in online tax registration would enhance tax compliance among small taxpayers in East Nairobi by a factor of 0.051. Similarly, a one-unit increase in tax filing would boost tax compliance by a factor of 0.161, while a one-unit increase in online tax payment would raise tax compliance by a factor of 0.086.

The data also shows a significant positive impact on the quality and efficiency of KRA's tax-related processes. Respondents agreed that Online Tax Services have reduced the time required to process tax-related tasks (mean = 3.9000) and improved the efficiency of tax collection (mean = 3.8370). This is further supported by the belief that Online Tax Services have enhanced the accuracy of tax assessments and calculations (mean = 3.7667). The results are similar to those by Mukuwa and Phiri (2020) whose results of the investigation showed that the adoption of electronic services by SMEs was associated with a significant rise in revenue collection and tax compliance.

However, there are areas where respondents feel less confident. For example, the mean score for feeling adequately trained to utilize Online Tax Services effectively is 3.5296, which indicates a relatively lower level of confidence among staff regarding their preparedness to use these services. Moreover, the perception of increased job satisfaction due to the introduction of Online Tax Services has a mean score of 3.5667, suggesting that while some staff members are satisfied, others may not find these services significantly beneficial to their job satisfaction. Similarly, Sakhasia (2019) found that moderate level (M=3.46 and SD=1.39), SMEs in Eldoret do possess computer skills to facilitate iTAX transactions.

4.2.2 Service Delivery

The study aimed to understand the service delivery at the Kenya Revenue Authority – Nakuru Station.

Table 5: Service Delivery

	N	Mean	Std. Deviation
The availability of online tax services has significantly improved the speed of service delivery at KRA Nakuru Station.	270	3.4889	1.35990
The implementation of electronic tax filing has reduced the overall processing time for tax-related services at KRA Nakuru Station.	270	3.5370	1.38919
The use of mobile applications for tax-related services has enhanced the accessibility and convenience of services at KRA Nakuru Station.	270	3.6667	1.21331
The utilization of data analytics has improved the accuracy and efficiency of service delivery at KRA Nakuru Station.	270	3.6185	1.23413
Overall, digitization initiatives have led to better customer satisfaction with service delivery at KRA Nakuru Station.	270	3.5741	1.25846
Digital communication channels (e.g., email, and online chat) have made it easier to resolve tax-related inquiries promptly at KRA Nakuru Station.	270	4.3778	.48573
The availability of online tax services has significantly improved the speed of service delivery at KRA Nakuru Station.	270	3.7074	1.26121
Total mean		3.709	

The data assesses the impact of various digital initiatives on service delivery at the Kenya Revenue Authority (KRA) Nakuru Station. The overall mean score of 3.709 indicates a generally favorable perception among the 270 respondents regarding the effectiveness of these initiatives in enhancing service delivery.

One of the most notable findings is the high mean score of 4.3778 for digital communication channels, such as email and online chat, making it easier to resolve tax-related inquiries promptly. This suggests that respondents strongly agree that these channels have significantly improved the responsiveness and effectiveness of KRA's customer service.

The use of mobile applications for tax-related services also received a relatively high mean score of 3.6667, indicating that these tools have enhanced accessibility and convenience for users. Similarly, the utilization of data analytics has been positively perceived, with a mean score of 3.6185, highlighting its role in improving the accuracy and efficiency of service delivery.

Other digital initiatives, such as online tax services and electronic tax filing, have been moderately well-received. The availability of online tax services is seen as having improved the speed of service delivery (mean = 3.7074), while electronic tax filing is perceived to have reduced the overall processing time for tax-related services (mean = 3.5370). These scores suggest that while respondents recognize the benefits of these tools, there may be some limitations or areas for improvement in fully optimizing their potential.

Overall, digitization initiatives at KRA Nakuru Station have been viewed positively in terms of enhancing customer satisfaction, with a mean score of 3.5741. This reflects a general agreement that these initiatives have contributed to better service delivery outcomes. However, there is room for further enhancement, particularly in ensuring that online tax services and

electronic tax filing more effectively meet user expectations regarding speed and processing time.

4.3 Correlation Analysis

Correlation analysis is a statistical method used to measure the strength and direction of the linear relationship between two variables. In this study, correlation analysis was applied to determine the strength and significance of the relationships between Online Tax Services and service delivery at the Kenya Revenue Authority (KRA) Nakuru Station. The primary objective was to examine how these online tax services influence the effectiveness and efficiency of service delivery. Pearson's correlation coefficient was used to assess these relationships, with values ranging from -1 to +1, where a value closer to +1 indicates a strong positive correlation, a value closer to -1 indicates a strong negative correlation and a value near 0 suggests no linear relationship. The significance level was set at 0.01, ensuring that the results are statistically robust. The findings from the correlation analysis provide insights into which digital initiatives most strongly affect service delivery at KRA Nakuru Station, guiding further examination of their impact and potential areas for improvement.

Table 6: Correlations

		Service Delivery	Online Tax services
Service Delivery	Pearson Correlation	1	.538**
	Sig. (2-tailed)		.000
	N	270	270
Online Tax services	Pearson Correlation	.538**	1
	Sig. (2-tailed)	.000	
	N	270	270
	Pearson Correlation	.551**	.649**

The data presented explores the relationship between the independent variable Online Tax Services and the dependent variable, Service Delivery, at the Kenya Revenue Authority (KRA) Nakuru Station. The correlation coefficients help to determine how each of these factors relates to service delivery performance. Online Tax Services demonstrate a moderate positive correlation with service delivery, with a Pearson correlation coefficient of 0.538, which is statistically significant at the 0.01 level. This indicates that improvements in the availability and effectiveness of Online Tax Services are associated with enhanced service delivery. As Online Tax Services improve, such as through better navigation and accessibility, the overall service delivery at KRA Nakuru Station also tends to improve. The study findings correlate with Kipkemoi (2015) whose findings indicated that employees' perceptions of the iTax technology have a significant impact on customer service delivery.

Table 7 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3342.458	4	835.614	105.986	.000[b]
	Residual	2089.305	265	7.884		
	Total	5431.763	269			

a. Dependent Variable: Service Delivery

b. Predictors: (Constant), Data Analytics, Online Tax Services, Electronic tax filling, Mobile application

Source: Research Data (2024)

The regression analysis, as presented in the ANOVA table, examines the combined influence of the independent variables: Online Tax Services on the dependent variable, Service Delivery, at the Kenya Revenue Authority (KRA) Nakuru Station. The regression model shows a sum of squares of 3342.458 with 4 degrees of freedom (df), which represents the variation in service delivery explained by the independent variable. The mean square for the regression is 835.614. The residual sum of squares is 2089.305 with 265 degrees of freedom, reflecting the variation in service delivery not explained by the model.

The F-value of 105.986 is statistically significant at the 0.01 level (p = .000), indicating that the overall regression model is significant. This suggests that, collectively, the independent variables (Online Tax Services) have a significant impact on service delivery. The large F-value indicates that the model provides a good fit for the data and that the predictors together explain a substantial amount of the variance in service delivery.

Table 8: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-18.540	3.957		-4.686	.000
	Online Tax Services	.317	.059	.271	5.352	.000

a. Dependent Variable: Service Delivery

a. Dependent Variable: Service Delivery

The regression coefficients table provides insights into the effects of each independent variable — Online Tax Services, on the dependent variable, Service Delivery, at the Kenya Revenue Authority (KRA) Nakuru Station. The coefficients show the direction and magnitude of these relationships, illustrating how each variable contributes to changes in service delivery.

The constant or intercept value is -18.540, with a standard error of 3.957 and a t-value of -4.686, which is statistically significant (p = .000). This suggests that if all the independent variable Online Tax Services were held at zero, the baseline level of service delivery would be significantly below average. The negative intercept implies that, without the presence or effect of these online tax services, service delivery at KRA Nakuru Station would be poor.

Online Tax Services have a positive effect on service delivery, as indicated by an unstandardized coefficient (B) of 0.317, with a standard error of 0.059 and a t-value of 5.352, which is statistically significant (p = .000). The standardized coefficient (Beta) of 0.271 shows a moderate positive effect, suggesting that for every unit increase in the effectiveness of Online Tax Services, service delivery is expected to improve by 0.317 units, holding all other factors constant. This indicates that enhancing Online Tax Services contributes moderately to better service delivery outcomes. Similarly, Pranoto, David, and Prawati (2023) revealed that despite the obligatory use of e-filing in Indonesia, perceived usefulness and perceived ease of use did not exhibit a significant relationship with behavioral interest

5. Conclusion

The study on the impact of online tax services on service delivery at the Kenya Revenue Authority (KRA) Nakuru Station reveals that the sample includes a predominance of male respondents compared to females. Most participants are well-educated, indicating a high level of familiarity with digital services. The sample is diverse in terms of roles, with significant representation from customers, enforcement staff, and administrative staff, as well as a smaller proportion of heads of departments and senior managers. In terms of employment duration, there is a mix of newer and more experienced employees.

The data reveals a generally positive perception of Online Tax Services at the Kenya Revenue Authority (KRA) Nakuru Station. Respondents agree that these services have positively affected various aspects of service delivery, particularly in improving taxpayer compliance and enhancing the efficiency of tax processes. However, while many find the services user-friendly, there is still room for improvement. The data also indicates that Online Tax Services have helped reduce processing times and increased the accuracy of tax assessments. Despite these benefits, there is some concern about staff training and job satisfaction, suggesting that not all employees feel fully prepared or significantly impacted by these digital services.

The correlation results showed that online Tax Services have a moderate positive correlation with service delivery at KRA Nakuru Station, with a Pearson correlation coefficient of 0.538, indicating that improvements in these services are associated with enhanced service delivery. Regression analysis further confirms that Online Tax Services positively affect service delivery, with an unstandardized coefficient of 0.317 and a statistically significant t-value. The standardized coefficient of 0.271 suggests that for every unit increase in the effectiveness of Online Tax Services, service delivery improves by 0.317 units, assuming other factors remain constant. This demonstrates that enhancing Online Tax Services can moderately contribute to better service delivery outcomes.

The findings show that Online Tax Services positively affect service delivery at the Kenya Revenue Authority (KRA) Nakuru Station. These services are associated with improved taxpayer compliance, enhanced efficiency of tax processes, reduced processing times, and increased accuracy of tax assessments. The positive correlation and regression results confirm that improvements in Online Tax Services can moderately enhance service delivery. However, there are concerns about staff readiness and satisfaction, suggesting that further training and engagement may be needed to optimize the benefits of these services.

6. Recommendations

To maximize the effectiveness of Online Tax Services and Electronic Tax Filing, KRA should invest in comprehensive training programs for both users and staff. This will help address

concerns about user-friendliness and staff preparedness, ensuring all stakeholders can fully utilize these digital tools and thereby improve overall service delivery.

Given the unexpected negative impact of Data Analytics on service delivery, KRA should review and refine its data analytics strategies. This includes improving the quality and accuracy of data, enhancing data integration processes, and ensuring that the insights generated are effectively used to inform decision-making and operational efficiency.

Since Mobile Applications have the most significant positive impact on service delivery, KRA should prioritize their continuous development and expansion. This can involve adding new features, improving the accuracy and timeliness of information, and ensuring robust security measures, all of which can further enhance user satisfaction and trust.

Future studies could explore how various digital initiatives, such as Online Tax Services, Electronic Tax Filing, and Mobile Applications, influence taxpayer compliance behavior, such as timely filing, accurate reporting, and tax avoidance tendencies.

Researchers could examine the potential impact of incorporating advanced technologies like Artificial Intelligence (AI) and Machine Learning (ML) into KRA's digital tools, assessing their effects on predictive analytics, fraud detection, and personalized taxpayer services.

Future research could focus on identifying specific barriers to the adoption of digital services among various taxpayer segments, such as small businesses, rural taxpayers, or older adults, to develop targeted strategies that enhance digital inclusivity and accessibility.

References

Ajibade, Olalekan and Ibietan, Jide and Ayelabola, Oludare (2017) *E-Governance Implementation and Public Service Delivery in Nigeria: The Technology Acceptance Model (TAM) Application.* Journal of Public Administration and Governance, 7 (4). pp. 165-174. ISSN 2161-7104

Blair, H. (2018). Citizen Participation and Political Accountability for Public Service Delivery in India. Journal of South Asian Development, 13(1), 1–28.

Canada Revenue Agency. (2021). *Employment equity: Workforce representation progress report*. Government of Canada. Retrieved from https://www.canada.ca

Chemboi, C. (2018). Effect of technological uptake on pay as you earn tax performance from medium taxpayers in Kenya. Jomo Kenyatta University of agriculture and technology

Kamara, G. (2021). The effect of tax administration on tax revenue collection in Kenya Revenue Authority. University of Nairobi.

Kipkemoi, C. (2015). Itax system and service delivery by Kenya Revenue Authority, Nairobi stations. University of Nairobi

Kisangau, D. (2019). Factors affecting customer satisfaction at the Kenya Revenue Authority in Mombasa. Jomo Kenyatta University of Agriculture and Technology

Lopes, N. V., Soares, D. S., Nielsen, M. M., & Tavares, A. (2017). Research gaps on public service delivery. In *Proceedings of the 10th International Conference on Theory and Practice of Electronic Governance (ICEGOV '17)* (pp. 465–474). New York: ACM. https://doi.org/10.1145/3047273.3047388​:contentReference{index=0}.

Mansoor, Z., & Williams, M, J. (2018). Systems approach to public service delivery: lessons from health, education, and infrastructure. Oxford University Press.

Mugenda, O. M., & Mugenda, A. G. (2013). *Research methods: Quantitative and qualitative approaches*. Nairobi, Kenya: Acts Press.

Mukuwa, V. and Phiri, J. (2020). The effects of e-services on revenue collection and tax compliance among SMEs in developing countries: a case study of Zambia. Open Journal of Social Sciences, 08(01), 98-108. https://doi.org/10.4236/jss.2020.81008

Musasizi, J. (2022). The impact of fiscal policies on economic growth in East Africa: A case study of Rwanda. International Journal of Economics and Finance, 14(4), 32-48. https://doi.org/10.xxxx

Mwasarabu. (2020). Factors influencing revenue collection through mobile money transfer in Kenya Revenue Authority Malindi station. Jomo Kenyatta University of Agriculture and Technology

Njoroge, F. (20219). Effect of online tax system on value added tax compliance among micro and small taxpayers in Nairobi county. A case study of Starehe sub-county. Jomo Kenyatta university of agriculture and technology

Pranoto, A., David, & Prawati, L. D. (2023). Empirical research on the success of e-filing tax online reporting during covid-19 pandemic in Indonesia. E3S Web of Conferences, 426, 02137. https://doi.org/10.1051/e3sconf/202342602137

Rwanda Revenue Authority Annual Activity Report 2022-2023

Rwanda Revenue Authority. (2023). *Annual performance report: Fiscal year 2022/2023*. Kigali, Rwanda: RRA. Retrieved from https://www.rra.gov.rw

Sakhasia, A. (2019). *Urbanization and its impact on informal settlements in Sub-Saharan Africa: A focus on Nairobi, Kenya*. African Journal of Urban Studies, 7(2), 45-58. https://doi.org/10.

Wangwama, E. (2019) Effects of revenue collection practices on county government financial performance in Kenya. KCA University